

Work Order ID 121225

121225

Page 1

June-18-14 1:55:47 PM

Item ID: D3454-7

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bushing

Stop

NS2

Start Date: 6/18/14

Start Qty: 40.00

40

Cust Item ID:

Required Date: 6/18/14

Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan: ML5

Date: 14-06-18

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3454	Rev B								

100 *100* Hardinge CNC LATHE SMALL 0.00
 Hardinge Memo 0.00
 Hardinge CNC Lathe Small 1-TURN AS PER FOLIO FA573 & DWG D3454 ,FOLIO
 REV: A DWG REV: B 2-DEBURR AS REQUIRED

110 *110* QC2- Inspect parts off machine FAI/FAIB 0.00
 QC Memo 0.00
 Quality Control

120 *120* QC8- Inspect parts - second check 0.00
 QC Memo 0.00
 Quality Control

40 00 00 00 DAS 25 9-89 14-6-27

40 00 00 00 DAS 25 9-89 14-6-27

40 00 00 00 DAS 40 9-89 14/06/29

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Engineering		
NCR No. _____	Suspected	Unapproved		Machining	Small Fab	Prod. Eng. Coor.	Quality		
				Thermoforming	Finishing	Rec/Store/Packaging	Other		
				Large Fab	Composite	Supplier			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear		General									
2AG 04 26-0	Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced						
	Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up						
	Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure						
	Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld						
	Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled						
	Crushing	Countersink	Misaligned/off center	Positioned Wrong							
	Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge							
	Inspection Strip in Tube	Drawing	Misread								
	Marks/Chatter	Drill Holes	Off-set								
	Turning Sequence	Finish	Out of Calibration								
	Wave/Twist in Tube	Fit/Function	Out of Sequence								

Work Order ID 121225

June-18-14 1:55:47 PM

121225

Page 2

Item ID: D3454-7

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bushing

Stop

NS2

Start Date: 6/18/14 Start Qty: 40.00

40

Cust Item ID:

Required Date: 6/18/14 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150*	Identify as per dwg & Stock Location	0.00							
Packaging	Memo	0.00							
Packaging									
160 *160*	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

DAS

26

9-89

40X 14-7-1

MLJ 14-07-02

ME 14-7-01

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework
 Scrap
 Use-as-is
 Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

Picklist Print

June-18-14 1:55:50 PM

Page 1

Work Order ID: 121225

121225
D3454-7

Parent Item: D3454-7

Parent Item Name: Bushing

Start Date: 6/18/14

Required Date: 6/18/14

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP REV. A 05.11.17 New Issue EC
 IPP Rev:B 08-04-25 chg to revB DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.750		Purchased	No			100	f	77.1120	0.0526	3		**	

M303R0 750

303 Round Bar 0.750

Location	Loc Oty	Loc Code
MAT028	77.112	
m127464	46.782	
m128882	0.196	
m129366	30.134	81-73

SL 14-6-27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____

DISPOSITION

Part No. _____

- Rework
- Scrap
- Use-as-is
- Suspected Unapproved

NCR No. _____

AGAINST DEPARTMENT/PROCESS

- Skid-tube
- Machining
- Thermoforming
- Large Fab

- Crosstube
- Small Fab
- Finishing
- Composite

- Water Jet
- Prod. Eng. Coor.
- Rec/Store/Packaging
- Supplier

- Engineering
- Quality
- Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General													
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>									
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>									
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>									
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>									
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>									
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	Other <input type="checkbox"/>									
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>										
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>											
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>											
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>											
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>											

DART AEROSPACE LTD	Work Order:	121225
Description: Bushing	Part Number:	D3454-7
Inspection Dwg: D3454	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

845

40

9-19

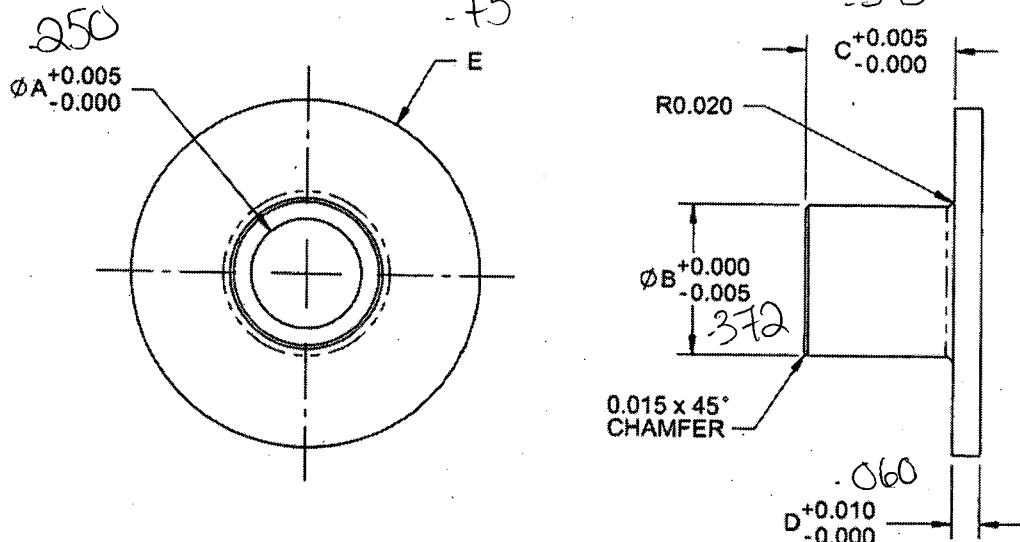
Measured by:	JL	Audited by:	40 9-99	Prototype Approval:	N/A
Date:	14-6-27	Date:	14/06/29	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.09.01	New Issue	KJ/JLM	
B	07.11.23	Dimensions updated	KJ/EC/DD	

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>RF</i>	APPROVED <i>RF</i>	DRAWING NO. D3454	REV. B SHEET 1 OF 1
DATE 05.12.05		TITLE BUSHING	SCALE 2:1
A	05.09.02	NEW ISSUE	
B	05.12.05	REVISE -5/-7	

RELEASED

05.12.05 *RF*D3454-X

1) SPECIFICATION: D3454-X BUSHING

DASH No.

WHERE 'X' IS THE SIZE PER THE FOLLOWING TABLE:

DASH No.	A (in)	B (in)	C (in)	D (in)	E (in)
-1	0.316	0.435	0.420	0.060	1.00
-3	0.316	0.435	0.400	0.060	0.75
-5	0.250	0.372	0.400	0.060	0.75
-7	0.250	0.372	0.343	0.060	0.75



NOTES:

- 1) MATERIAL: AISI 303 SS ROUND BAR (REF. DART SPEC. M303R)
- 2) FINISH: NONE
- 3) IDENTIFY WITH P/N USING FINE POINT PERMANENT MARKER
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

SHOP COPY

RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO.121225-*MJ*

1406-18